



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,917	07/03/2001	Siu-Leong Ju	067339-0033	3640
20277 7590 02/18/2010 MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096				
EXAMINER				
WINTER, JOHN M				
ART UNIT		PAPER NUMBER		
3685				
MAIL DATE		DELIVERY MODE		
02/18/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/763,917

Applicant(s)

IU ET AL.

Examiner

JOHN M. WINTER

Art Unit

3685

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-30 and 62-77 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-30 and 62-77 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C2)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Acknowledgements

1. The Applicants amendment filed on December 20, 2007 is acknowledged. Claims 19-30 and 62-77 remain pending.

Response to Arguments

2. Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 19-30 and 62-77 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention,

Claim 19 recites the limitation "not readily visible by the viewer" does not quantify an amount of "warping" and is therefore indefinite.

Claims 20-30 and 62-77 are either dependant upon claim 19 or contain similar limitations and are rejected for at lest the same reasons.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 19-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoads, (US Patent No 6,363,159) in view of Saito (US Patent 6,182,218) and further in view of Chaum (US Patent 5,959,717).

5. As per claims 19-30,

Rhoads ('159) discloses a playback unit, comprising:

an input for receiving an encoded data stream bearing a video image;

(Figures 2 and 3 -- Examiner notes that the manner in which a claimed apparatus is intended to be used does not distinguish the claimed apparatus from the prior art- if the prior art has the capability to so perform (MPEP 2114 and *Ex parte Masham*, 2 USPQ2d 1647 (197))).

means for imparting a prescribed transformation to the video image (Column 28, lines 24-54, column 64, lines 15-30) for warping the video image in a manner, and by an amount, not readily visible to a viewer (Column 26; lines 1-28, Examiner notes that Rhoads states that the "break" in the signal is not noticable using a high end sound system)

Rhoads ('159) does not explicitly disclose "a decoder for decoding the encoded data stream;". Saito ('218) discloses "a decoder for decoding the encoded data stream; ,(Figure 1, column 8, lines 15-18-- Examiner notes that that the manner in which a claimed apparatus is intended to be used does not distinguish the claimed apparatus from the prior art- if the prior art has the capability to so perform (MPEP 2114 and *Ex parte Masham*, 2 USPQ2d 1647 (1987))). It would be obvious to one of ordinary skill in the art at the time of the invention to combine the Rhoads ('159)'s method with Saito's teaching in order to enforce digital rights management systems.

Rhoads ('159) does not explicitly disclose such that a composite video image produced by multiple video playback units will be distorted and the distortion of the composite video image can be seen by the viewer, wherein said warping changes with time during playback of the video image ". Chaum ('717) discloses "such that a composite video image produced by multiple video playback units will be distorted and the distortion of the composite video image can be seen by the viewer, (Column 8, lines 57-67 – column 9 lines 1-9) wherein said warping changes with time during playback of the video image " (Column 6, lines 43-63). It would be obvious to one of ordinary skill in the art at the time of the invention to combine the Rhoads ('159)'s in view of Saito's teachings with Chaum ('717) teaching in order to enforce digital rights management systems.

As per claims 20-30

The Examiner states that Chaum discloses the claimed feature of wherein said warping changes with time during playback of the video image " (Column 6, lines 43-63). The

substitution of another old and well known warping process such as "warping is selected randomly from among a plurality of mapping functions pre-stored in a playback unit; or the image is warped by compressing spacing between pixels in one direction and expanding spacing in another direction; or said warping changes upon scene change of said video image or warping is defined by a geometric transformation; or warping is derived by backward warping of a two-dimensional geometric transformation of said video image; or warping is performed by a three-dimensional transformation of said video image; or wherein said warping is described by a linear function or warping is described by a quadratic function or warping is described by a spline function; or applying a motion vector to pixels of said video image for image transformation or performing different image transformations in different regions of said video image" as disclosed in claims 21-30 is no more than the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement. Ex parte Smith, 83 USPQ2d 1509 (Bd. Pat. App. & Int.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 62-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhoads, (US Patent No 6,363,159) in view of Chaum (US Patent 5,959,717).

7. As per claim 62,

Rhoads ('159) discloses a method for processing an audio or video data stream containing digital watermark data, comprising:

utilizing a playback unit for playing out information contained in the audio or video data stream; (Column 28, line 55 – column 29, line 7)

during playing by the playback unit, altering the audio or video information by applying to the audio or video data stream a predetermined mapping function associated with the playback unit to distort the audio or video, (Column 28, lines 24-54)

Rhoads ('159) does not explicitly disclose “wherein audio or video information produced by combining multiple audio or video data streams corresponding to said information, from different playback units, is distorted and the distortion of the produced audio information can be heard by a listener of the produced audio information or the distortion of the produced video information can be seen by a viewer of the produced video information, said video information comprises a video image embedded in a video data stream, and said video image is distorted during playback by a playback unit in accord with the predetermined mapping function by an amount not readily visible to the viewer, but such that a video image produced by combining multiple video data streams reproduced by multiple different playback units is distorted and the distortion can be seen by the viewer”. Chaum ('717) discloses “wherein audio or video information produced

by combining multiple audio or video data streams corresponding to said information, from different playback units, is distorted and the distortion of the produced audio information can be heard by a listener of the produced audio information or the distortion of the produced video information can be seen by a viewer of the produced video information, said video information comprises a video image embedded in a video data stream, and said video image is distorted during playback by a playback unit in accord with the predetermined mapping function by an amount not readily visible to the viewer, but such that a video image produced by combining multiple video data streams reproduced by multiple different playback units is distorted and the distortion can be seen by the viewer, (Column 8, lines 57-67 – column 9 lines 1-9) wherein said warping changes with time during playback of the video image” (Column 6, lines 43-63). It would be obvious to one of ordinary skill in the art at the time of the invention to combine the Rhoads (‘159)’s with Chaum (‘717) teaching in order to enforce digital rights management systems.

Examiner notes that the claimed feature of “wherein audio or video information produced by combining multiple audio or video data streams corresponding to said information, from different playback units, is distorted and the distortion of the produced audio information can be heard by a listener of the produced audio information or the distortion of the produced video information can be seen by a viewer of the produced video information, said video information comprises a video image embedded in a video data stream, and said video image is distorted during playback by a playback unit in accord with the predetermined mapping function by an amount not readily visible to the

viewer, but such that a video image produced by combining multiple video data streams reproduced by multiple different playback units is distorted and the distortion can be seen by the viewer, wherein said warping changes with time during playback of the video image” merely states the result of the limitations in the claim adds nothing to the patentability or substance of the claim. (Texas Instruments Inc. v. International Trade Commission 26, USPQ2d 1010 (Fed. Cir. 1993); Griffin v. Bertina, 62 USPQ2d 1431 (Fed. Cir. 2002); Amazon.com Inc. v. Barnesandnoble.com Inc., 57 USPQ2d 1747 (CAFC 2001)

The Examiner further notes that optional or conditional elements do not narrow the claims because they can always be omitted. See e.g. MPEP §2106 II C: “Language that suggest or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. [Emphasis in original.] ” As a matter of linguistic precision, optional elements do not narrow the claim because they can always be omitted.

As per claim 63,

Rhoads ('159) discloses the method in accordance with claim 62

Rhoads ('159) does not explicitly disclose “wherein said mapping function changes with time during playback of the video image by a playback unit”. Chaum ('717) discloses “wherein said mapping function changes with time during playback of the video image by a playback unit (Column 8, lines 57-67 – column 9 lines 1-9, and Column 6, lines 43-63). It would be obvious to one of ordinary skill in the art at the time of the invention to

combine the Rhoads ('159)'s in view of Saito's teachings with Chaum ('717) teaching in order to enforce digital rights management systems.

As per claims 64-77,

The Examiner states that Chaum discloses the claimed feature of wherein said warping changes with time during playback of the video image" (Column 6, lines 43-63). The substitution of another old and well known warping process such as "The mapping function is selected randomly from among a plurality of mapping functions pre-stored in a playback unit; or the image is distorted by the playback unit by compressing spacing between pixels in one direction and expanding spacing in another direction; or mapping function is changed upon scene change of said video image; or the mapping function is changed in a first manner within a scene, and is changed in a second manner upon a scene change; or mapping function is defined by a geometric transformation; or mapping function is derived by backward warping of a two-dimensional geometric transformation of said video image; or mapping function is derived by a three-dimensional geometric transformation of said video image, or mapping function is linear; or mapping function is quadratic; or mapping function is a spline function; or wherein a motion vector is applied to one or more pixels of said video image for image transformation, or the mapping function is obtained from a stored table, or the mapping function is obtained from a computed table; or wherein different image transformations are performed in different regions of said video image" as disclosed in claims 64-76 are no more than the simple substitutions of one known element for another or the mere application of a known

technique to a piece of prior art ready for improvement. Ex parte Smith, 83 USPQ2d 1509 (Bd. Pat. App. & Int.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN M. WINTER whose telephone number is (571)272-6713. The examiner can normally be reached on M-F 8:30-6, 1st Fridays off. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Calvin Hewitt can be reached on (571) 272-6709. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3685

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMW

/Calvin L Hewitt II/
Supervisory Patent Examiner, Art Unit 3685